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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,104	04/14/2004	Brent K. Hyde	L3440/285208 (LV589)	6160
23370	7590	08/28/2007		
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			EXAMINER SELF, SHELLEY M	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 08/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/824,104	HYDE, BRENT K.	
	Examiner	Art Unit	
	Shelley Self	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on July 27, 2006 has been considered but is ineffective to overcome the prior art reference and an action on the merits follows.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1 there is no antecedent basis for the recitation, "the wing cutter" it is not clear how this cutter relates to the router cutter shaft and the cutter. Accordingly a clear understanding of the claimed invention cannot be gleaned. Clarification is required.

With regard to claim 4, the recitation "the cutter" does not find clear antecedent basis within the claims. For example the parent claim includes a cutter having a radius and width and a wing cutter, it is not clear if the recitation "the cutter" in claim 4 refers to the cutter having a radius and width or the wing cutter or if the cutter having a radius and width is the same as the wing cutter. Clarification is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 9 as best as can be understood and as noted in the previous Office Action, and claims 4-8 as best as can be understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Pozzo (5,899,252). Pozzo discloses a router cutting for cutting a panel-receiving groove comprising: a shaft for mounting in an electric motor a cutter (21) having a cutting radius mounted on the shaft, and a guide bearing (35) having a radius mounted on the shaft, wherein there is difference between the cutting radius and the bearing radius. Pozzo does not explicitly disclose the different between the cutting radius and the bearing radius is greater than the bearing radius multiplied by the square root of 2. Although, Pozzo does not explicitly disclose the different between the cutting radius and the bearing radius is greater than the bearing radius multiplied by the square root of 2 such change in size would be an obvious matter of design choice.

*In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) held that limitations pertaining to size are not sufficient to patentably distinguish over the prior art. Further *Gardner v. TEC Systems Inc.* 725 F.2d, 1338 220 USPQ 777 (Fed. Cir. 1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and the device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

The prior art reference Pozzo discloses all of the claimed structure except for the relative dimensions of the cutter radius and the bearing radius, however the invention as claimed would

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not perform any differently than that of the prior art Pozzo, accordingly the claimed invention fails to positively set forth patentably distinguishing structure/subject matter over the prior art Pozzo. The mere selection or calculation of an optimal size/dimension of the radii of both the cutter and guide bearing are well within the general knowledge of a skilled artisan in the art and are not non-obvious.

With regard to claims 2, 3 and 9 as best as can be understood Pozzo does not disclose the guide bearing having an approximately 5/16 inch, 7/16 inch or 10mm diameter or a cutter diameter of 17mm. As noted above, the specific selection of size and/or dimensions is well within the knowledge of a skilled artisan and would result from routine engineering practices and therefore is not non-obvious. Further Applicant's disclosure does not positively set forth any criticality to the diameter measuring 5/16 inch, 7/16 inch, 10mm or 17mm (cutter diameter); thus in the absence of any criticality to these dimensions it would have been obvious at the time of the invention to one having ordinary skill in the art to select a diameter for the guide bearing measuring either 5/16 inch, 7/16 inch or 10mm and a cutter diameter measuring 17mm as such requires only routine skill in the art and does not in itself warrant patentability.

With regard to claims 4-8, Pozzo does not explicitly disclose the cutting radius to be  $11/32$ ", the cutting diameter to be 0.669", the cutter width to be  $1/4$ " or  $1/8$ ". It would have been obvious to the skilled Artisan at the time of the invention to construct Pozzo's router cutter having specific dimensions, i.e., the cutting radius to be  $11/32$ ", the cutting diameter to be 0.669", the cutter width to be  $1/4$ " or  $1/8$ " because discovering the optimum value of a result effective variable involves only routine skill in the art. In the absence of an positively recited criticality to the dimensions of the router cutter discovering or determining these values would

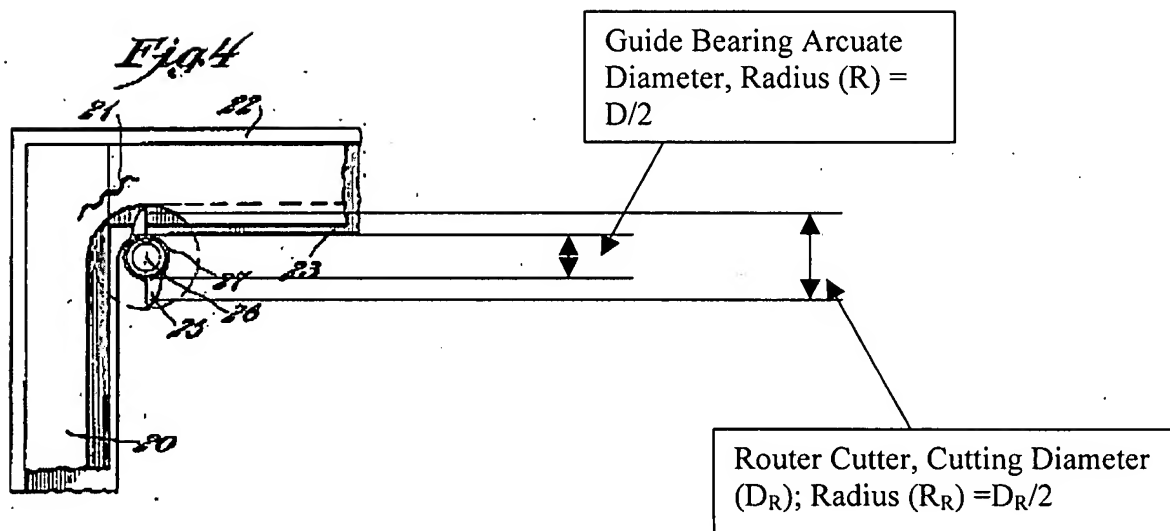
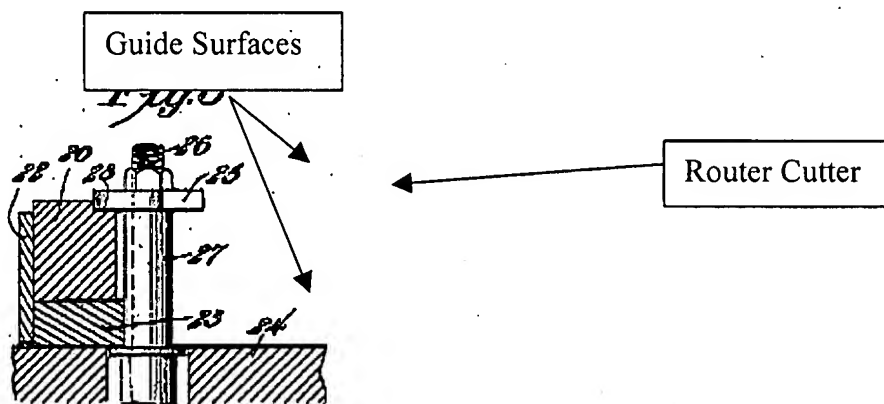
result from routine engineering practices and required only routine skill in there are and therefore in itself does not warrant patentability. See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

Claim 10 and claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over B.S. Vaughan (1,933,232) in view of Hansen (4,505,086) as noted in the previous Office Action. Vaughan discloses a method of cutting a groove to receive a panel in a frame having a plurality of members comprising: a preparing the frame members, temporarily assembly the frame members into the frame manipulating one of the frame or router to cut a continuous groove inside the frame (fig. 2) using a router cutter (25) while contacting the inside face of the frame with an arcuate bearing surface having an arcuate radius R with the arc centered on the cutter axis of rotation (fig. 4). Vaughan does not disclose preparing the frame members by forming joint elements. Hansen teaches in a closely related art a method of cutting a groove in a panel wherein frame members are prepared by forming joint elements in the end of the frame (figs. 9, 11). Because the references are from closely related art, it would have been obvious at the time of the invention to one having ordinary skill in the art to construct Vaughan's frame members by forming joint elements on the end of the frame so as to form the frame as taught by Hansen.

As to the recitation, wherein the cutting diameter of the router cutter is larger than the product of the radius R multiplied by the square root of 2, neither Vaughan nor Hansen disclose such. However it is obvious to the skilled artisan that both Vaughan (figs. 3, 4) and Hansen (fig. 2) have a guide-bearing surface having an arcuate surface having a radius that is less than the

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radius of the router cutter. Without a difference between the guide bearing radius and the router cutting radius would lead to an entire surface being trimmed as opposed to a groove being formed in a workpiece, i.e., the guide bearing arcuate surface must have a diameter less than the cutter and therefore a radius less than the cutting radius so as to facilitate groove/shaping cutting.



As noted above with reference to claims 1-3 and 9, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) held that limitations pertaining to size are not sufficient to patentably distinguish over the prior art. Further *Gardner v. TEC Systems Inc.* 725 F.2d, 1338 220 USPQ 777 (Fed. Cir. 1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and the device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. The relative calculation requiring, the cutting diameter of the router cutting to be larger than the product of the radius R multiplied by the square root of 2, merely as size relative dimension. Because no specific sizes of the radius of either the guide bearing or the router cutter have been positively recited or defined within the written disclosure, Applicant has not set forth any criticality to the size of these elements. Instead Applicant has only stated that there is a relative size dimension between the two, i.e. the guide bearing and the router cutter. Such relative size dimensions are obvious and well known in the art so as to facilitate groove/bevel/chamfer and joint cutting and shaping. Furthermore, the determination of the specific size of the relative dimension between the guide bearing and router cutter results from known engineering practices and routine experimentation and does not in itself warrant patentability. Additionally it is also well known in the woodworking and mechanical art to use guide bearings of different sizes in combination with router cutters/bits so as to create a groove having a desired size, width and depression.



***Response to Arguments***

Applicant's arguments filed July 27, 2006 have been carefully considered but they are not persuasive. Applicant's arguments are drawn to the failure of prior art, Pozzo to disclose a router cutter. Applicant argues that Pozzo fails to disclose a router cutter and instead discloses "*a profile cutter, which is used for cutting a panel tongue*". Applicant further argues that Pozzo is not capable of creating a slot or groove and that Pozzo's cutter only cuts on its upper side and is incapable of cutting on its lower side. This argument is not deemed persuasive, because Applicant is arguing criticality not positively recited within the claims. For example the claims as written are silent to any structure of the router cutter, or any recitation to cutting of the router cutter on a lower or upper side of the router cutter. The claims merely state, *a router cutter for cutting panel-receiving grooves*. The recitation of "for cutting panel-receiving grooves" is in intended use recitation and does not impart any structure within the claim and is therefore not given any patentable weight. Furthermore, the body of the claim is silent to any capability of the router cutter. As noted above, Pozzo does disclose a router cutter. Accordingly the claimed invention does not patentably distinguish over the prior art and the rejection is proper and stands.

In response to Applicant's arguments that Vaughan does not disclose a method for cutting a groove and instead teaches cutting a rabbet, "a rabbet is not a groove" and that Vaughan cannot be used to create an unending slot, this argument is not deemed persuasive. A rabbet is defined as *a channel, groove or recess cut out of the edge or face of a surface* (Merriam Webster On-Line Dictionary). Accordingly a rabbet is therefore a groove and therefore Vaughan does disclose the invention as claimed. The rejection is deemed proper and therefore stands. As to the argument of Vaughan not being able to create an unending slot, this is criticality not

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positively recited within the claims. The claims as currently presented are silent to any creation or capability of creating an unending slot.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

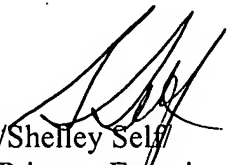
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is 571-272-4524. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Shelley Self/  
Primary Examiner  
Art Unit 3725

August 21, 2007